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RESEARCH

Interests	Socio-economics · renewable natural resources management · agroforestry · Global energy assessment · -land and water
Areas	Horticulture · Infectious Diseases · Agronomy and Crop Science · Animal Science and Zoology · Forestry · General Agricultural and Biological Sciences

RESEARCH SUMMARY

40	1,192	14	18	5.49	37%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 40 publications listed below, 2007–2026. Field-weighted impact is the mean over the 30 works scored for it; 1.00 is the world average for works of the same field, type and year. 11 of the 30 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Associate Professor 1998–present
Agroforestry, Kwame Nkrumah University of Science and Technology College of Science, Kumasi, Ghana

PUBLICATIONS

Journal articles 37

1. Stephen Yaw Opoku, Victor Rex Barnes, Finn Plauborg, Francis Kwame Padi, Steve Amisah, Daniel Dompreh, John Tennyson Afele, Joseph Anokye, Richard Asante, Emmanuel Gyan Ansah, Maxwell Hene Osei, **Olivia Agbenyega**, Uffe Jorgensen, Soren Marcus Pedersen, Torsten Rodel Berg (2026). Impact of overhead shade intensity and cocoa variety on the micro-climate and productivity of cocoa farms in two ecological zones of Ghana. *Ecological Frontiers*. https://doi.org/10.1016/j.ecofro.2026.02.015
2. Ishmael Hashmiu, Evans Dawoe, **Olivia Agbenyega** (2025). Farmers' climate risk perceptions and their influence on cocoa agroforestry adoption in marginal areas of Ghana. *Agroforestry Systems*. https://doi.org/10.1007/s10457-025-01395-2
3. Ammal Abukari, Ishmael Hashmiu, James Kaba Seutra, Akwasi Adutwum Abunyewa, **Olivia Agbenyega** (2025). Farmers' perceptions and acceptability of Biochar as a soil amendment in the Tolon district of Ghana. *Environment Development and Sustainability*. https://doi.org/10.1007/s10668-025-06656-9
4. Richard Asante, Søren Marcus Pedersen, Torsten Rodel Berg, **Olivia Agbenyega**, Steve Amisah, Victor Rex Barnes, Samuel Ayesu, Stephen Yaw Opoku, John Tennyson Afele, Joseph Anokye (2024). Evaluating the Resilience of the Cocoa Agroecosystem in the Offinso Municipal and Adansi North Districts of Ghana. *Applied Sciences*. https://doi.org/10.3390/app14188170
5. John Tennyson Afele, **Olivia Agbenyega**, Victor Rex Barnes, Steve Amisah, Finn Plauborg, Søren Marcus Pedersen, Torsten Rødel Berg, Joseph Anokye, Stephen Yaw Opoku, Richard Asante, Eunice Nimo, Evans Dawoe (2024). Ghana's Cocoa: Farmers' Perceptions of Climate Change and Its Effect on Yield and Livelihood. *Green and Low-Carbon Economy*. https://doi.org/10.47852/bonviewglce42023218
6. Joseph Anokye, Akwasi Adutwum Abunyewa, Uffe Jørgensen, James Seutra Kaba, Kwame Twum-

Ampofo, Evans Dawoe, Victor Rex Barnes, Finn Plauborg, Søren Marcus Pedersen, Torsten Rødel Berg, **Olivia Agbenyega**, Steve Amisah, John Tennyson Afele, Stephen Yaw Opoku, Richard Asante, Jacob Ulzen (2024). Mitigation of greenhouse gas emissions through shade systems and climate-smart soil fertility interventions in cocoa landscapes in the Semi-deciduous ecological zone of Ghana. *Soil Advances*. https://doi.org/10.1016/j.soilad.2024.100001

7. **Olivia Agbenyega** (2023). Morphological and molecular identification of Helopeltis species on cocoa from Kaliwining experimental station, Jember, Indonesia. *Pelita Perkebunan (A Coffee and Cocoa Research Journal)*. https://mail.ccrjournal.com/index.php/ccrj/article/view/552
8. Nembot Fogang Brice Armel, Sherihane Aryeetey, Japhet Senyo Kamasah, Kennedy Gyau Boahen, Michael Owusu, Augustina Adjei-Boateng, **Olivia Agbenyega**, Alexander Kwarteng, Suzanne Hingley-Wilson, Kwasi Obiri-Danso, Daniel Ansong, Augustina Angelina Sylverken (2023). Solid waste motor tricycle operators in Kumasi, Ghana, harbour respiratory pathogens; a public health threat. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0284985
9. John Tennyson Afele, **Olivia Agbenyega**, Victor Rex Barnes, Steve Amisah, Emmanuel Acheampong, Victor Owusu, Joseph Anokye, Richard Asante, Stephen Opoku, Ezekiel Laten, Emmanuel Danquah (2023). Understanding and addressing climate change impacts on cocoa farming in Ghana. *Environmental Challenges*. https://doi.org/10.1016/j.envc.2023.100823
10. Ishmael Hashmiu, **Olivia Agbenyega**, Evans Dawoe (2022). Cash crops and food security: evidence from smallholder cocoa and cashew farmers in Ghana. *Agriculture & Food Security*. https://doi.org/10.1186/s40066-022-00355-8
11. Ishmael Hashmiu, **Olivia Agbenyega**, Evans Dawoe (2022). Determinants of crop choice decisions under risk: A case study on the revival of cocoa farming in the Forest-Savannah transition zone of Ghana. *Land Use Policy*. https://doi.org/10.1016/j.landusepol.2021.105958
12. Joseph Adjebeng-Danquah, Stephen Kwasi Asante, **Olivia Agbenyega**, Desmond Sunday Adogoba, Joseph Yeboah (2022). Evaluation and Selection of Elite Cassava Varieties for Storage Root Yield in the Transition and Guinea Savannah Ecologies of Ghana. *International Journal of Plant & Soil Science*. https://doi.org/10.9734/ijpss/2022/v34i2231411
13. Louisa Adomaa OFORI, Eunice NIMO, John Tennyson AFELE, **Olivia AGBENYEGA** (2022). INTEGRATING CASHEW (ANACARDIUM OCCIDENTALE) WITH FOOD CROPS: PERCEPTIONS OF FARMERS AT AMOMA, IN THE KINTAMPO SOUTH DISTRICT OF THE BONO EAST REGION OF GHANA. *Journal of Applied Life Sciences and Environment*. https://doi.org/10.46909/journalalse-2021-021
14. Y.O. Frimpong, C. Antwi, **O. Agbenyega**, S.K. Oppong, A.S. Anim-Jnr, V. Burimuah, R. Folitse, B.O. Emikpe (2022). Nutrient profiling of ruminant feed resources in Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2022.e01495
15. Samuel Ayesu, Victor Rex Barnes, **Olivia Agbenyega** (2021). Threats of Changes in Land-Use and Drivers on Owabi and Barekese Watershed Forests in Ghana. *International Journal of Applied Geospatial Research*. https://doi.org/10.4018/ijagr.2021070101
16. Kwame Ochire-Boadu, Akwasi A. Abunyewa, James Seutra Kaba, Kwame Twum-Ampofo, Evans L. K. Dawoe, **Olivia Agbenyega**, Rex V. Barnes (2020). Improved legume fallows: Influence on nitrogen and microbial dynamics, and maize (Zea maysL) grain yield in sub-humid zone of West Africa. *Cogent Food & Agriculture*. https://doi.org/10.1080/23311932.2020.1785778
17. Vitus Burimuah, Augustina Sylverken, Michael Owusu, Philip El-Duah, Richmond Yeboah, Jones Lamptey, Yaw Oppong Frimpong, **Olivia Agbenyega**, Raphael Folitse, Ben Emikpe, William Tasiame, Eddie-Williams Owiredu, Samuel Oppong, Christopher Antwi, Yaw Adu-Sarkodie, Christian Drosten (2020). Molecular-based cross-species evaluation of bovine coronavirus infection in cattle, sheep and goats in Ghana. *BMC Veterinary Research*. https://doi.org/10.1186/s12917-020-02606-x
18. Linda Batsa Debrah, Aliyu Mohammed, Jubin Osei-Mensah, Yusif Mubarik, **Olivia Agbenyega**, Nana Kwame Ayisi-Boateng, Kenneth Pfarr, Janina Melanie Kuehlwein, Ute Klarmann-Schulz, Achim Hoerauf, Alexander Yaw Debrah (2020). Morbidity management and surveillance of lymphatic filariasis disease and acute dermatolymphangioadenitis attacks using a mobile phone-based tool by community health

volunteers in Ghana. *PLoS neglected tropical diseases*. https://doi.org/10.1371/journal.pntd.0008839

19. Eunice Badu, James S. Kaba, Akwasi A. Abunyewa, Evans K. Dawoe, **O. Agbenyega**, Rex V. Barnes (2019). Biochar and inorganic nitrogen fertilizer effects on maize (Zea mays L.) nitrogen use and yield in moist semi-deciduous forest zone of Ghana. *Journal of Plant Nutrition*. https://doi.org/10.1080/01904167.2019.1659347
20. Philip El-Duah, Benjamin Meyer, Augustina Sylverken, Michael Owusu, Lina Theresa Gottula, Richmond Yeboah, Jones Lamptey, Yaw Oppong Frimpong, Vitus Burimuah, Raphael Folitse, **Olivia Agbenyega**, Samuel Oppong, Yaw Adu-Sarkodie, Christian Drosten (2019). Development of a Whole-Virus ELISA for Serological Evaluation of Domestic Livestock as Possible Hosts of Human Coronavirus NL63. *Viruses*. https://doi.org/10.3390/v11010043
21. Philip El-Duah, Augustina Sylverken, Michael Owusu, Richmond Yeboah, Jones Lamptey, Yaw Oppong Frimpong, Vitus Burimuah, Christopher Antwi, Raphael Folitse, **Olivia Agbenyega**, Samuel Oppong, Yaw Adu-Sarkodie (2019). Potential Intermediate Hosts for Coronavirus Transmission: No Evidence of Clade 2c Coronaviruses in Domestic Livestock from Ghana. *Tropical Medicine and Infectious Disease*. https://doi.org/10.3390/tropicalmed4010034
22. Erasmus Narteh Tetteh, Akwasi Adutwum Abunyewa, Henry Oppong Tuffour, Joseph Nketiah Berchie, Patricia Pinamang Acheampong, Kwame Twum-Ampofo, Evans Dawoe, Vincent Logah, **Olivia Agbenyega**, Stella Ama Ennin, Isaac Nunoo, Caleb Melenya, Eric Owusu Danquah, Victor Rex Barnes, Samuel Tetteh Partey (2019). Rubber and plantain intercropping: Effects of different planting densities on soil characteristics. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0209260
23. Vitus Burimuah, Augustina Sylverken, Michael Owusu, Philip El-Duah, Richmond Yeboah, Jones Lamptey, Yaw Oppong Frimpong, **Olivia Agbenyega**, Raphael Folitse, William Tasiame, Benjamin Emikpe, Eddie-Williams Owiredu, Samuel Oppong, Yaw Adu-Sarkodie, Christian Drosten (2019). Sero-prevalence, cross-species infection and serological determinants of prevalence of Bovine Coronavirus in Cattle, Sheep and Goats in Ghana. *Veterinary Microbiology*. https://doi.org/10.1016/j.vetmic.2019.108544
24. George Ashiagbor, William Oduro, Lucy Gyiele, Daniel Siaw, Victor Rex Barnes, **Olivia Agbenyega**, Kwame Twum-Ampofo, Samuel Partey, Naresh Thevathasan, Andrew Gordon, Rick Gray, Helen Hambly Odame (2019). Toward sustainable land resources management with agroforestry: empirical evidence from the Sunyani west district of Ghana. *Agroforestry Systems*. https://doi.org/10.1007/s10457-019-00419-y
25. Gabriel Osei-Tutu, Akwasi A. Abunyewa, Evans K. Dawoe, **Olivia Agbenyega**, Rex V. Barnes (2018). Effect of multipurpose trees and shrubs on degraded mined-out soil in a semi-deciduous forest zone of West Africa. *Land Degradation and Development*. https://doi.org/10.1002/ldr.3110
26. A Dramani, **O Agbenyega** (2017). Legalizing small scale gold mining in Gbane in the Upper East Region, Ghana. *Journal of African Political Economy and Development*. https://doi.org/10.10520/ejc-c3d16e031
27. Emmanuel Kombiok, **Olivia Agbenyega** (2017). The characteristics of financing arrangements for the production and marketing of shea (Vitellaria paradoxa) butter in Tamale in the Northern Region of Ghana. *Southern Forests a Journal of Forest Science*. https://doi.org/10.2989/20702620.2016.1255403
28. Dennis Kyereh, Beatrice Obiri Darko, **Olivia Agbenyega**, Emmanuel Opuni-Frimpong (2015). ANALYSIS OF SMALLHOLDER FORESTS FOR POVERTY ALLEVIATION AND CLIMATE CHANGE MITIGATION IN THE NKORANZA SOUTH DISTRICT OF THE BRONG AHAFO REGION OF GHANA. *HAL (Le Centre pour la Communication Scientifique Directe)*.
29. **O Agbenyega** (2015). ASSESSMENT OF PREVAILING SAFETY MANAGEMENT PRACTICES AMONG PETROL FILLING STATIONS IN GHANA: A CASE STUDY IN AGONA NKWANTA, INCHABAN AND SEKONDI-TAKORADI. *International Journal of Sciences: Basic and applied research*. https://hal.science/hal-05429582/
30. **O Agbenyega** (2015). Effects of 2010 Floods on Livelihoods and Households Food Security in Pru District of Ghana. *ADRRI Journal of Agriculture and Food Sciences*. https://scholar.google.com/scholar?cluster=5624540278452457334&hl=en&oi=scholarr
31. Augustina Angelina Sylverken, M Owusu, **O Agbenyega**, EE Nkrumah (2015). Human–bat interactions in rural West Africa. *Emerging Infectious Diseases*. https://pmc.ncbi.nlm.nih.gov/articles/PMC4517717/

32. **Olivia Agbenyega**, M Owusu, EE Nkrumah (2015). MERS-CoV-related viruses in bats in Ghana and Europe. *Epidemiology and ecology of virus and host: bats and coronaviruses in Ghana, West Africa*. https://figshare.mq.edu.au/ndownloader/files/34528082#page=31

33. **Olivia Agbenyega**, E Nkrumah, M Owusu (2015). Widespread coronavirus infection in Ghanaian bats: seasonal, demographic and ecological factors influence infection risk. *Epidemiology and ecology of virus and host: bats and coronaviruses in Ghana, West Africa*. https://figshare.mq.edu.au/articles/thesis/Epidemiology_and_ecology_of_virus_and_host_bats_and_coronaviruses_in_Ghana_West_Africa/19432703/1/files/34528082.pdf#page=44

34. Michael Owusu, Augustina Annan, Victor Max Corman, Richard Larbi, Priscilla Anti, Jan Felix Drexler, **Olivia Agbenyega**, Yaw Adu-Sarkodie, Christian Drosten (2014). Human Coronaviruses Associated with Upper Respiratory Tract Infections in Three Rural Areas of Ghana. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0099782

35. Augustina Annan, Heather J. Baldwin, Victor Max Corman, Stefan M. Klose, Michael Owusu, Evans Ewald Nkrumah, Ebenezer Kofi Badu, Priscilla Anti, **Olivia Agbenyega**, Benjamin Meyer and 12 others (2013). Human Betacoronavirus 2c EMC/2012–related Viruses in Bats, Ghana and Europe. *Emerging infectious diseases*. https://doi.org/10.3201/eid1903.121503

36. Philip Worlanyo Dugbley, **Olivia Agbenyega** (2013). The Effect of Poultry Manure on the Early Growth Performance of Milicia excels Seedlings. *Journal of Tropical Silviculture*.

37. **O Agbenyega** (2009). Application of an ecosystem function framework to perceptions of community woodlands. *Land use policy*. https://www.sciencedirect.com/science/article/pii/S0264837708000872

Book chapters 1

1. Suani T. Coelho, **Olivia Agbenyega**, Astrid Agostini, Karl-Heinz Erb, Helmut Haberl, Monique Hoogwijk, Rattan Lal, Oswaldo Lucon, Omar Masera, Jos É Roberto Moreira, Gunilla Björklund, Fridolin Krausmann, Siwa Msangi, Christoph Plutzar, Rik Leemans (2012). Land and Water: Linkages to Bioenergy. *Cambridge University Press eBooks*. https://doi.org/10.1017/cbo9780511793677.026

Conference papers 1

1. Alexander Yaw Debrah, A Mohammed, **O Agbenyega** (2019). MORBIDITY MANAGEMENT AND SURVEILLANCE OF LYMPHATIC FILARIASIS PATHOLOGY AND ACUTE DERMATOLYMPHANGIOADENITIS (ADLA) ATTACKS USING A MOBILE PHONE-BASED TOOL BY COMMUNITY HEALTH .... *AMERICAN JOURNAL OF TROPICAL MEDICINE AND HYGIENE*. https://scholar.google.com/scholar?cluster=4268046107243912467&hl=en&oi=scholarr

Reports 1

1. **O Agbenyega** (2007). Application of the ecosystem functions framework to community woodlands. *Cranfield University*. https://scholar.google.com/scholar?cluster=12457379514145755448&hl=en&oi=scholarr